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Hatem DS, Halpin T. (2019). Becoming Doctors: Examining Student Narratives to Understand the Process of Professional Identity Formation Within a Learning Community. Open Access Articles. <https://doi.org/10.1177/2382120519834546>. Retrieved from <https://escholarship.umassmed.edu/oapubs/3798>

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Becoming Doctors: Examining Student Narratives to Understand the Process of Professional Identity Formation Within a Learning Community

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Journal of Medical Education and Curricular Development
Volume 6: 1–7
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DOI: 10.1177/2382120519834546



ABSTRACT

BACKGROUND: Professional identity formation is a key aim of medical education, yet empiric data on how this forms are limited.

METHODS: Our study is a qualitative analysis of student reflections written during the final session of our Becoming a Physician curriculum. After reading their medical school admission essay and their class oath, students wrote about a “time, or times during your third year when you felt like a doctor.” The reflections were qualitatively analyzed by the evaluation team, looking for themes found in the reflections.

RESULTS: Narrative themes separated into 4 distinct categories, specifically that performing physician tasks can make one feel like a doctor, demonstrating caring is a fundamental task of doctors, integrating personal ideals with professional values promotes professional identity formation, and the theme of never feeling like a doctor. Subsets of these broad categories provide further insight into individual and integrative tasks. Patients, patient families, and students through their own reflection prompted learners to feel like doctors in 74% of narratives, whereas physicians or the care team did so in 26% of our narratives.

CONCLUSION: Students are able to reflect on times during their principal clinical year where they feel like doctors, taking a step toward forming a professional identity. Having faculty prompt and support such reflection can help faculty understand the student experience of their principal clinical year and promote professional identity formation.

KEYWORDS: Professional identity formation, medical students, medical education, professional development

RECEIVED: January 6, 2019. **ACCEPTED:** January 11, 2019.

TYPE: Learning Communities in Undergraduate Medical Education – Original Research

FUNDING: The author(s) received no financial support for the research, authorship, and/or publication of this article.

DECLARATION OF CONFLICTING INTERESTS: The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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Professional identity formation (PIF) is one of the chief aims of medical education.^{1,2} Physician identity is defined as “a representation of self, achieved in stages over time during which the characteristics, values, and norms of the medical profession are internalized, resulting in an individual thinking, acting, and feeling like a physician.”¹

Early studies discussed professionalism as a set of behaviors, and there is much literature about methods to assess these behaviors.^{3,4} Exhibiting these behaviors demonstrates professional character. More recent efforts extend beyond this, characterizing PIF as a developmental process,⁵ often co-constructed in the context of relationships with others^{6–9} and embodies the integration of values and attitudes into student-physician character¹⁰ and propose that we should reframe education to support PIF and develop ways to do this.^{11,12}

Medical education literature on PIF focuses in 2 areas. There are papers that synthesize educational literature and theory and propose theoretical models and mediators of PIF.^{13,14} PIF integrates the developmental phase of learners, places these learners into the unique environment of medical school and the health care system, requires these learners to negotiate the pushes and pulls of their personal and professional relationships—with friends, family, and faculty role models—and requires them to

encounter symbols and engage in rituals, and ceremonies, both formal and informal, integrate feedback from others, and combine it with their own self assessment—to hopefully form a new integrated identity with time.¹³

The second group of studies focuses on learner reflections and their influence on PIF. Narrative writing is an increasingly common method used in medical education to promote reflection,^{15–21} and studies using narrative reflection have been used to study PIF. Commonly, such narratives are parts of broader longitudinal portfolios^{22,23} or longitudinal faculty development programs²⁴ and as PIF is a longitudinal, developmental process, PIF can be looked for and found as an outcome of such programs.

In medical education, narrative reflection allows the teaching and assessment of PIF to take shape. Professional formation, much like other learning processes, must be understood in the context of interpersonal relationships and cultural values.^{1,25} A key component of PIF entails offering feedback on professionalism and Professional Identity Formation with longitudinal faculty role models.¹

Therefore, we sought to describe, in rich detail, the development of professional identity at the University of Massachusetts Medical School as it emerges during the principal clinical year in our students as this is the time of deepest immersion in the



lifeworld of the practice of medicine and a time when learners are able to describe the range of events that contribute to their emerging professional identity.

Methods

Study methods

Our study took place during the 2015–2016 academic year, and analyzed essays from our third-year class. At the University of Massachusetts Medical School, we created a curriculum titled “Becoming a Physician” (BAP), 3 spaced small group sessions during their third year in which students reflect on their experiences along with their learning community mentor, a faculty member who follows them from the beginning of medical school to their graduation along with a group of 5 to 6 other students who have worked with that mentor up to that point in medical school. The topics discussed in the BAP curriculum include the following:

- Adjusting to the Clinical Years
- Challenges During the Clinical Years
- Career Discernment and Decision-Making* (Becoming the kind of doctor I want to become)

During the last session (*), which occurs on the students’ last day of third year, we ask students to review their admission essay to medical school, reflect on the class oath they wrote just prior to starting their third year, and complete an essay to be discussed with their mentor group, with the following assignment.

Write about a time or times during your third year when you felt like a doctor. You were doing something, whether with a patient or with your team, when you thought “This is what a doctor would do” or “This is what I envisioned when I thought of becoming a doctor.” Describe in as much detail as you remember the situation, the participants, and all that was going on.

Evaluation methods

The evaluation team (DH and TH) read the essays and then met to discuss themes. A set of themes was developed using the constant comparative method, arriving at consensus on themes through discussion. Evaluators met weekly, read 10 essays between meetings, and met 4 times until no new themes emerged (saturation). We read 32 essays for derivation of the full codebook. Once the full codebook of the themes was developed, the evaluation team coded the subset of essays to determine agreement on use of codes (validation set). We read a validation set of 15 essays with “100% agreement” by the 2 evaluators. The primary author (DH) coded the remaining 39 essays.

Results

For our study, we reviewed 86 individual student essays (71.6%). A total of 120 students were eligible to submit such essays. Table 1 details the rotation and patient care settings where

Table 1. Rotation and setting where students feel like doctors.

| | N (%) |
|---|-----------|
| Student rotation | |
| Medicine | 27 (31.1) |
| Pediatrics | 11 (12.7) |
| Family medicine | 11 (12.7) |
| Surgery | 8 (9.2) |
| Neurology | 7 (8.1) |
| OB/GYN | 7 (8.1) |
| Psychiatry | 4 (4.6) |
| Anesthesia | 1 (1.1) |
| 2 specialties | 5 (6.2) |
| 3-4 specialties | 5 (6.2) |
| Patient setting | |
| Inpatient | 48 (55.4) |
| Outpatient | 18 (20.7) |
| 2 settings | 10 (11.5) |
| Emergency room | 3 (3.4) |
| Operating room | 2 (2.3) |
| Delivery room | 1 (2.3) |
| Phone | 1 (1.1) |
| 3 settings: ED, IP, OP | 1 (1.1) |
| Persons making students feel like doctors | |
| Patient | 42 (48.4) |
| Attending | 13 (15.1) |
| Patient’s family | 9 (10.3) |
| Patient and family | 8 (9.3) |
| Self | 5 (5.9) |
| Patient or family/care team | 4 (4.6) |
| Patient/attending | 2 (2.3) |
| Care team | 1 (1.1) |
| Nurse anesthetist | 1 (1.1) |
| Resident | 1 (1.1) |
| Patient/family/attending | 1 (1.1) |

Abbreviations: OB/GYN, obstetrics and gynecology; ED, emergency department; IP, in-patient department; OP, out-patient department.

student narratives were set. Most students wrote about one experience, while 10 students (12.4%) wrote about experience taking place on 2 to 4 rotations. Most events took place during the Internal Medicine (IM), Pediatric and Family Medicine blocks (56.5%), while fewer than 10% of the events took place

Table 2. Essay themes and their frequencies.

| THEME | NUMBER (%) |
|------------------------------------|------------|
| Knowledge | 3 (3.4) |
| Doing tasks | 7 (8.1) |
| Synthesis of information | 19 (22.1) |
| Demonstrating caring/relationships | 17 (19.7) |
| Caring with learner insight | 13 (15.1) |
| Knowledge and caring | 17 (19.7) |
| Going beyond the team | 5 (5.8) |
| External recognition | 1 (1.6) |
| Never felt like a doctor | 4 (4.6) |

on Surgery, Ob/GYN, Neurology, Psychiatry, Anesthesia, or when rotating with multiple specialties. The inpatient setting was the location of the event for 48 (55.4%) of the incidents contributing to PIF. For our learners, 73.2% of the time, patients and patient's families, or the students themselves, made them feel like doctors, while in 26.7% of narratives, health care team members (attending physicians, residents, nurses, and other members of the care team) made students feel like doctors. These data are all presented in Table 1.

Themes and sub-themes found in student reflections and their frequency are found in Table 2. Exemplar quotes, chosen as the clearest and most compelling illustrations of the team, are used to demonstrate richness of those themes within the text.

Four distinct categories or themes emerge from our essays, specifically, performing physician tasks can make one feel like a doctor, demonstrating caring is a fundamental task of doctors, integrating personal ideals with professional values promotes PIF, and the theme of never feeling like a doctor.

Performing Physician Tasks Can Make One Feel Like a Doctor

Students talked about performing tasks and engaging in clinical reasoning that they thought of as "doctoring." This took several forms.

Using student knowledge

Possessing knowledge with conviction, knowing they are appropriately educating patients, changes students from being called a doctor by patients to feeling like a doctor, part of the care plan, and care team.

There's also the fact that, a lot of the time, I have no idea what I'm doing. I'm often unsure of my answers even when I'm right . . . It's strange when patients call me "Doctor" though. I always correct them and tell them that I'm a medical student. The funny thing is that they just keep calling me doctor anyway . . . The best moments for me are those few times when I actually know what I'm talking about and can actually help the patient . . . She now understands her condition and I helped her come up with a plan.

Performing tasks

Some students described situations where they felt like doctors, when contributing meaningfully to the care of the patient. Interestingly, they did not always describe themselves doing typical physician work, like our example in which the student engages in the simple act of holding a patient's hand during an uncomfortable biopsy. This specific situation entailed an observant student, noticing the patient discomfort, choosing to act to contribute to care of the patient, as opposed to sitting back, wondering about her role, and if it was something she could or should do. Our student went so far as to say that they were not acting like a doctor but acting as a witness to suffering deciding to intervene.

We were in gynecology clinic, and the resident was trying to take a biopsy of the mass. CF was in excruciating pain and was extremely uncomfortable . . . I found myself in a small clinic room, feeling useless and in the way. I felt that I was intruding on this woman's painful moment. I was inexperienced and had no knowledge or medical value to contribute, so I helped in the only way I thought I could—I held her hand. Her tissue was friable, so the biopsy was taking some time, and she was squeezing my hand so tight with tears streaming down her face as they attempted to get enough of a sample. I wasn't acting like a doctor . . . but it was one of the first times during third year that I felt I had provided a real benefit to a patient—that I wasn't an extraneous member of the team who was burdensome, but rather somebody who fulfilled a need that would otherwise have been neglected.

Synthesizing information

Learners feel like doctors when they synthesize scientific information, elicit, and then integrate complex background knowledge of the patient to formulate a plan, with follow-up, resulting in a thankful patient. Providing care for the whole person, taking into account their life context and going beyond just conveying technically correct information, is satisfying.

I broached the topic by asking her what she thought about her weight and she immediately started crying. I gave her some tissues and she told me how she knew she was overweight, and that she stopped caring for herself when her daughter passed away 2 years ago. She just focused on being there for her family and doing her job as a schoolteacher. She stopped exercising and started to eat whatever she wanted without caring about her health. I asked her if she wanted some nutrition information . . . I advised her about healthy eating habits . . . I also offered her a referral to a nutritionist . . . the following day . . . she thanked me for talking about her weight . . . I felt like a physician because I discussed a topic that isn't necessarily comfortable with a patient and was able to work with this patient to help inspire change towards a healthy lifestyle.

Demonstrating Caring Is a Fundamental Task of Doctors

Students recognize the power of caring, its role, and its deep impact. Essays that reflect caring make up the largest number of submissions in our data set. Sometimes, caring was all that remained as in a case of fetal loss at 40 weeks, when therapy or other medical procedures were not options. Yet our learner recognized the shared task of helping to carry the sorrow.

There are moments when we feel like doctors because of the good we can accomplish and the caring we can provide. But there are also moments that define our profession by the burden of sorrow we must carry. In this tragic moment I felt the weight of our profession in the eyes of my attending and in the empathy I felt for this patient. There was nothing we could do for her baby and yet what we did is what a doctor would do. We sat with her for a while and talked her through what needed to happen next. This was unfortunately the only care we could give her . . .

Other times students show surprise at their effect on patients; yet hearing about their effect, it causes them to step back, and develop insight into a more generalizable lesson, that the caring we extend is often perceived to be of greater value than the knowledge we possess.

Much to my surprise, Joe revealed that, among all the people he interacted with everyday, he believed I personally was “the reason” he had received such excellent care . . . I had no idea that the conversation Joe and I had that morning would be one of the last times he would ever speak . . . while I had viewed myself as the least important part of the medical team, Joe had trusted me and seen me as essential to his care. Though the vast majority of my medical school training has been dedicated to expanding clinical knowledge and perfecting treatment regimens, Joe thought little about my medical knowledge in his final days. In the face of death, he valued kindness, sincerity, companionship, and the feeling he wasn’t alone. Despite the short coat, when I was in the room with Joe he saw his doctor.

A number of essays talk about the integration of knowledge and caring, putting these 2 physician tasks together.

. . . I had a 22 year old with a terminal pulmonary condition . . . I joked she was such an interesting case for students because of the way her heart sounds were so special . . . She had me explain all of her findings and even wanted to listen for herself with my stethoscope. I found myself not even stopping to think about the physiology or the exam—I knew right away what to say and how to say it. It was a combination of a moment of teaching and patient connection that I don’t think I’ll ever forget.

Integrating Personal Ideals and Professional Values Promotes PIF

Although smaller in number, several essays involved students going beyond what was expected of them, sometimes with the student responding to their own sense of values even when the team did not require them to act—integrating knowledge and caring and extending beyond the team.

There was glue on her dentures. It looked like it could bother her upper lip, but she seemed content. I was curious why she had dentures at such a young age. “My ex knocked my teeth out,” she said. Her dentures broke and she couldn’t afford to fix them. So, she glued on her front tooth . . . Actually, even when I tried to talk to my resident about it, it was brushed off. The system is simply not designed to care for people as a whole human with multidimensional needs, fears, and aspirations . . . I will actively work to get to know my patients as people, because to me that is the essence of being a doctor.

When the resident dismisses the student concern as more than they can address, the student vows to find ways to address these social determinants of health during their career. This determination to live up to their own ideals represents a vital part of PIF, the integration of personal ideals with the values of the profession.

Never Felt Like a Doctor

Small subsets of students relate that they never felt like a doctor. They describe behaviors or actions they saw modeled, and things that they wish to incorporate into their future work, but did not describe events where they are the primary agents performing the task.

This reflection has been one of the most tricky to think about as compared to any other reflections I have written thus far this year. I believe it is very common as a medical student to envision what I would do personally when I become a doctor, because we spend countless hours overlooking our attending(s)’ shoulder while they go about their day, and we most definitely had moments where I think “this is something positive or negative that I would incorporate into my daily interaction with patients.”

We include one essay that involves external recognition of being called “doctor.”

I felt like a doctor when knowing that my patients knew I was a medical student but insisted on calling me doctor instead.

Discussion

We describe student perspectives on experiences during their principal clinical year that make them feel like doctors to add to the limited empirical data regarding medical student PIF. Students wrote these essays at the end of their third year, after reviewing their medical school admission essay and their class oath, the values that they as a class proposed to uphold. The class oath is started in their first year, and a subcommittee of the class refines what the class comes up with, and the class reads their oath before starting their third year. Thus, this small group, the last session of our BAP curriculum, encourages students to look at their initial motivation for medical school, reinforces the idea of PIF as a journey, and asks them to integrate the professed values they wish to uphold. This session combines all elements that Cooke and Irby propose as part of their conception of PIF in their seminal report—instruction on professional values, the use of symbols and ceremonies (our Oath Ceremony), using storytelling and reflection in the context of longitudinal advising/mentoring relationships to address professionalism, and the hidden curriculum.¹

PIF involves the socialization of learners into a new and complex context of medical care, in situation where role confusion and uncertainty is common.^{26,27} Essays reinforced that for many learners, they engage in tasks that seemed to imitate doctors and that “feeling like a doctor” was an uncertain and transient state, and was not achieved for small numbers of students.

Immersion in authentic work contexts leading to PIF seems to reinforce some experiential studies from the business literature which suggests that those entering investment banking begin to construct their professional identity by observing role models, “trying on” behavior they see from these role models, and then evaluating their provisional identity which they take on through these behaviors. Thus, professional identity forms through a “provisional self” that is repeatedly refined as these behaviors are tried on, evaluated, and then integrated or discarded.⁷

Contemporary constructivist theories of identity formation conceive identity to be a dynamic phenomenon that is continually negotiated and co-constructed within a social and relational environment.^{6-9,28-30} Using narrative as a means of reflection that is then discussed with more senior faculty is part of this process of “becoming.”⁹

Medical students should expect to encounter challenging experience, whether first-time encounters with death, significant illness, or the discrepancy between medicine’s expressed and enacted values.^{26,31} Reflection on experience is often triggered by dissonance created when a student’s internal ideals conflict with stated or implied external standard from their teachers or the external environment.³² Such reflection prompts shifts in learners, either reconciling their ideals and how it differs from the standard, leading to the possibility of student change, or preservation of the student’s internal ideal, discounting the dissonance from the ideal, with the student’s development potentially stagnating. Grappling with such dissonance through a commitment to reflection can promote personal growth³³ and reflective narratives that present challenges and lead faculty to act in accordance with deeply held beliefs, depicting the process of PIF in real-life settings.²⁴ Another type of dissonance is seen in our study: dissonance between what a physician does and how students perceive their own actions. Many students give voice to surprise at the effect they have on patients and as proof they did not see their identity change; they comment on not answering when their patients call them “doctor.” Our research team also saw examples where students seem to downplay their actions. Feeling “useless and in the way,” and with nothing else to do, one student held her patients hand during a painful biopsy, a profound act of caring, witness, and accompaniment, the very essence of being a physician. Yet without reflection and conversation with trusted others, reframing such narratives as essential to being a physician, there is a risk that such behavior will not be, or will be delayed in being, integrated into the student’s skills repertoire.

We placed our discussion of student PIF in this specific context of our learning communities. Learning communities are defined as “an intentionally created a group of students and/or faculty who are actively engaged in learning from each other.”³⁴ We also place this specific curriculum within learning communities because students are working with longitudinal faculty mentors in situations where they meaningfully connect

and build trust.³⁵ In this setting, known faculty can help students grapple with some of the challenges they face, process, and integrate experiences that contribute to or challenges to their professional identity.

Other models of clinical education, the Longitudinal Integrated Clerkship (LIC), promote both faculty-student and student-patient continuity of care. Continuity afforded by the LIC results in a safe environment in which students can meaningfully engage with patients and take responsibility for their care under the supervision of a physician teacher. This model of providing patient-centered care, while being taught by learner centered teachers over time, is a central tenet of medical education.^{36,37} Although not referred to as professional identity narratives, reflections from students engaged in LICs depict deep connections with patients while delivering comprehensive care to a panel of patients.³⁸

Continuity between teachers and learners extend back to the old apprenticeship model medical education.³⁹ More recent apprenticeship models emphasize key themes that enhance learning (1) divergent expectations between faculty and learners, (2) a safe space, (3) faculty as witnesses to change, (4) meaningful relationships, and (5) critical reflection.⁴⁰ Our curriculum reinforces these same principles.

Conversation with known faculty about patient care provided in real-life contexts or in real time when experiences are going on offer the possibility of personal reflection, informed by faculty feedback and input. Such critical reflection⁴¹ or informed self-assessment⁴² is a precursor for self-directed learning⁴³ and professional growth.³³

Yet, learners are immersed in medical education system where accountability to patients is complicated by learners’ accountability to more senior clinicians to whom they are dependent on for their evaluations.²⁷ Discussing challenges maybe seen as a marker of deficiency in this context. Our study lends potential support to this, as it demonstrates that physicians and team members largely do not address students feeling like doctors. In nearly three-quarters of experiences where students felt like doctors, it was patients, patient families, or through their own reflection that students felt like doctors. Reconciliation of student perspectives with that of their superiors is ideal to generate higher order critical reflection, necessary for personal growth and development.^{29,32,33} Without this more critical reflection,⁴¹ the risk remains of exacerbating students’ feeling of being an impostor.⁴⁴ Despite promoting this collaborative socialization process¹³ through our small group sessions, our study suggests that there is a way to go before socialization promoting PIF is woven into the broader fabric of medical education and clinical rotations. Although curriculum with longitudinal mentors and reflection on PIF may help students, placing this discussion with their clinical faculty directly in their clinical settings is needed to reinforce its importance.

If left on their own, students can experience a relative silence on their challenges and their PIF, and this silence is felt by

some to contribute to cynicism and decreased empathy in students.^{26,45} Through discussion of PIF and challenges to this in everyday medicine, we hope this decline in empathy can be reformulated and recast as a question of how to maintain our values and our humanism in the face of inevitable and ongoing challenges as opposed to how to cope with an inevitable decline in empathy. Efforts to promote resilience are the focus of much study, in third year and in medicine.^{46–48}

Limitations of this study are that it occurred in a single institution over a single year. It is unclear if additional study at our school, or other schools, would present new themes. There is no measure of how those who submitted essays might differ from those who did not. Our study addresses learners early in the process of their formation and is limited to the educational context. There needs to be ongoing opportunity to reflect on the range of critical experiences both inside and outside of work that contribute to and refine their professional identity.

Conclusions/Next Steps

We suggest that PIF be looked at as a developmental process⁵ arrived at through reflection, for students on their own, and with others, that will move learners from the expectation of changing their behaviors to changing their very identity, moving from doing the tasks of doctoring to embodying the identity of a physician, and from the ongoing process of becoming to the integrated sense of “being” a doctor.^{45,46}

We have studied the global concept of feeling like a doctor, and propose that next steps are to look at other components of the theoretical frameworks of PIF: how relationships (intrapersonal and interpersonal) change during medical school and how the influence of role models, the learning environment, and student reflection on these matters exert their influence on the PIF process.

Acknowledgements

Paper originally presented at the Thirteenth Annual Learning Communities Institute Conference, Seattle WA, September 2016.

Author Contributions

DSH—study design, data analysis, manuscript drafting, manuscript review and editing.

TH—data analysis, manuscript review and editing.

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